



MARYLAND Department of Health

Public Health Preparedness and Situational Awareness Report: #2019:40

Reporting for the week ending 10/05/19 (MMWR Week #40)

October 11th, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS

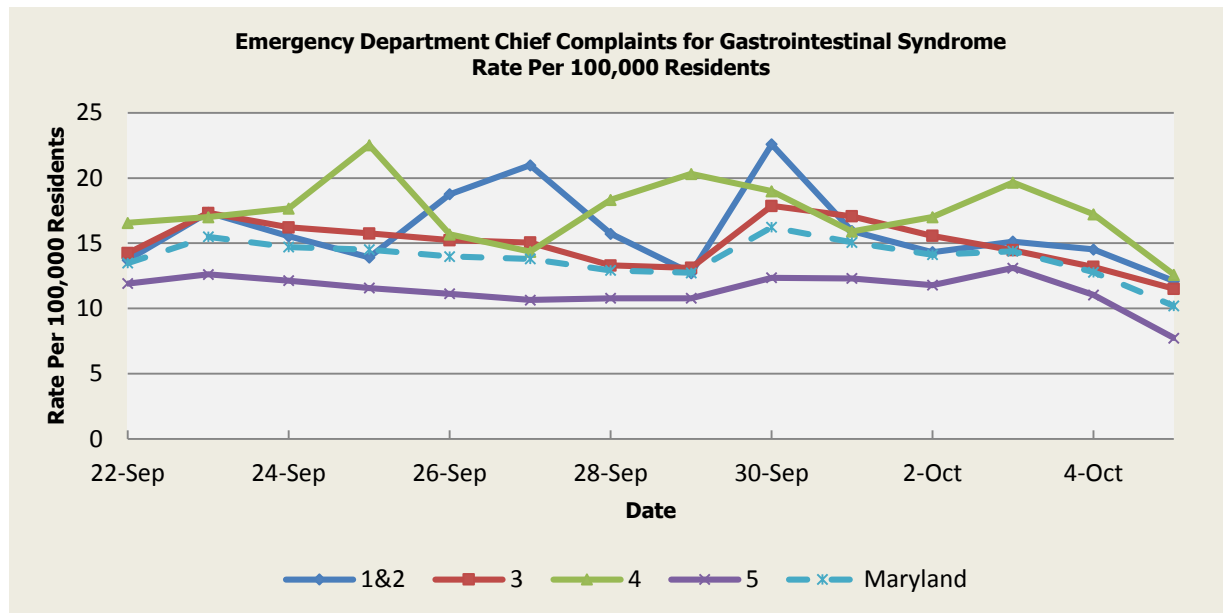
National:	No Active Alerts
Maryland:	Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the “Other” category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

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Gastrointestinal Syndrome



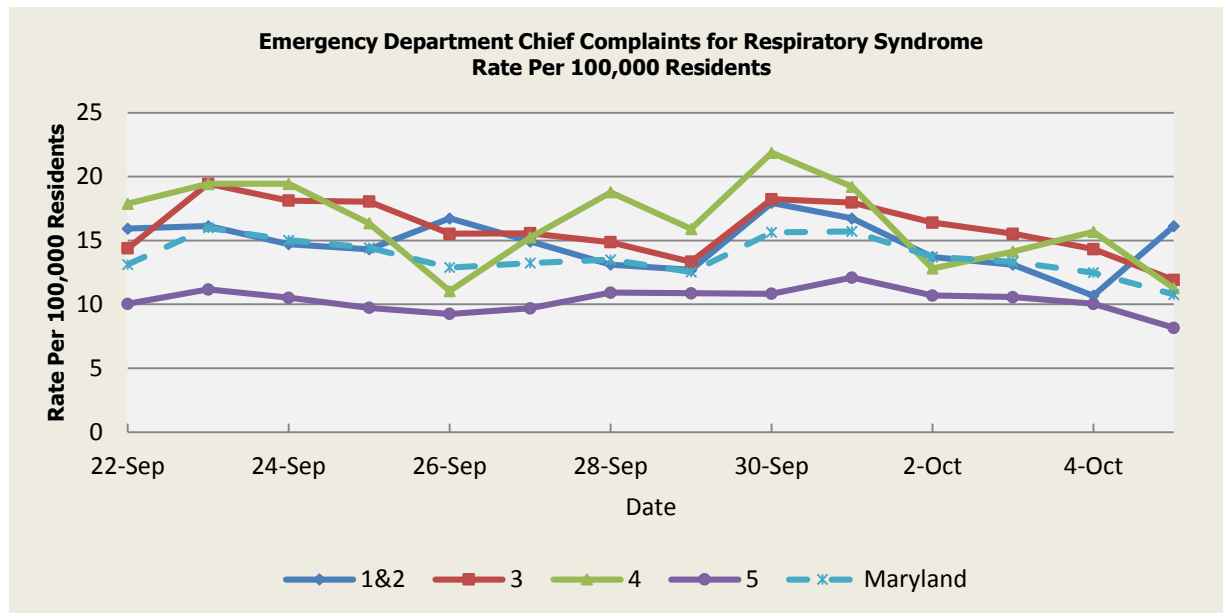
There were no Gastrointestinal Syndrome outbreaks reported this week.

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	13.30	15.09	15.94	10.26	13.15
Median Rate*	13.11	14.87	15.46	10.17	13.02

* Per 100,000 Residents

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Respiratory Syndrome



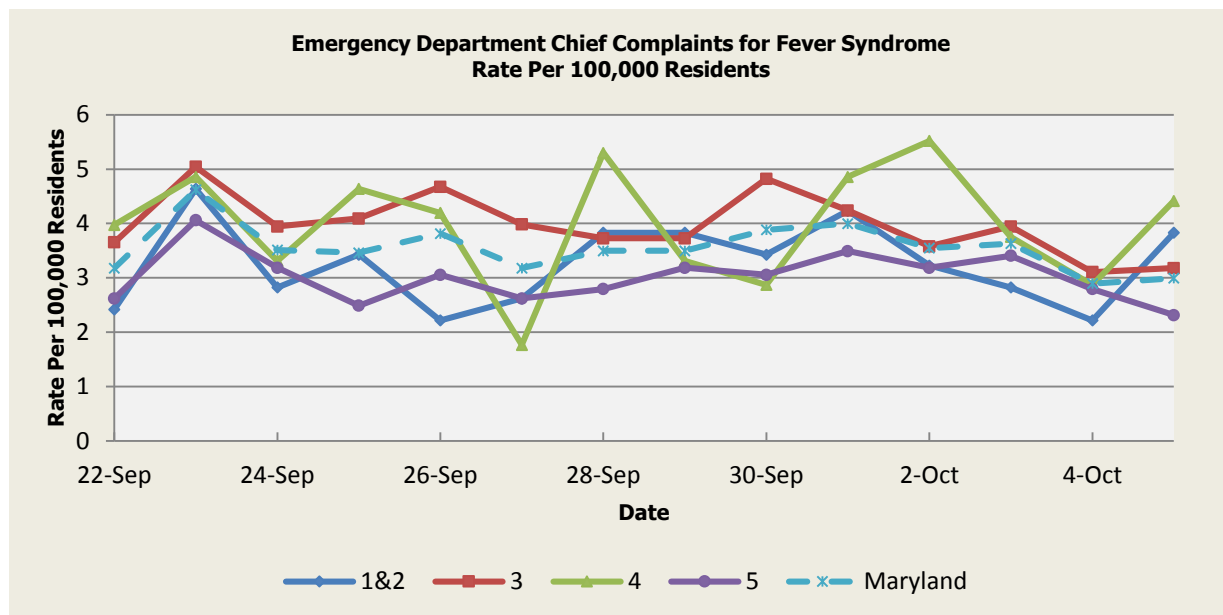
There were no Respiratory Syndrome outbreaks reported this week.

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.62	14.70	15.04	9.95	12.73
Median Rate*	12.10	14.14	14.35	9.60	12.25

* Per 100,000 Residents

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Fever Syndrome



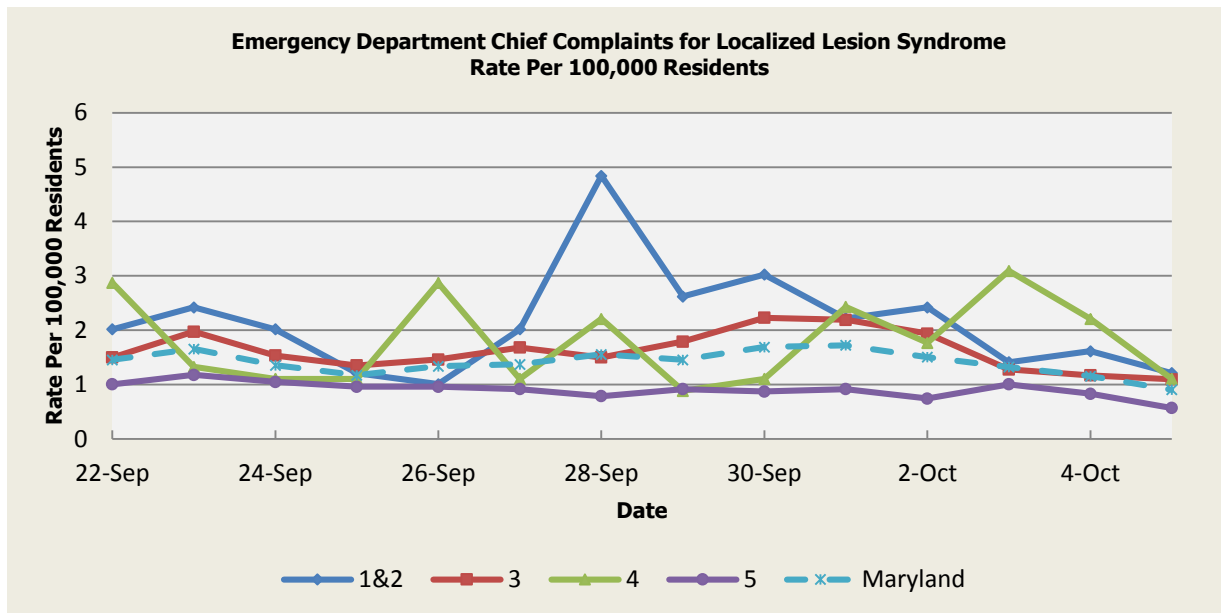
There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.08	3.90	4.12	3.04	3.52
Median Rate*	3.02	3.80	3.97	2.92	3.40

**Per 100,000 Residents*

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Localized Lesion Syndrome



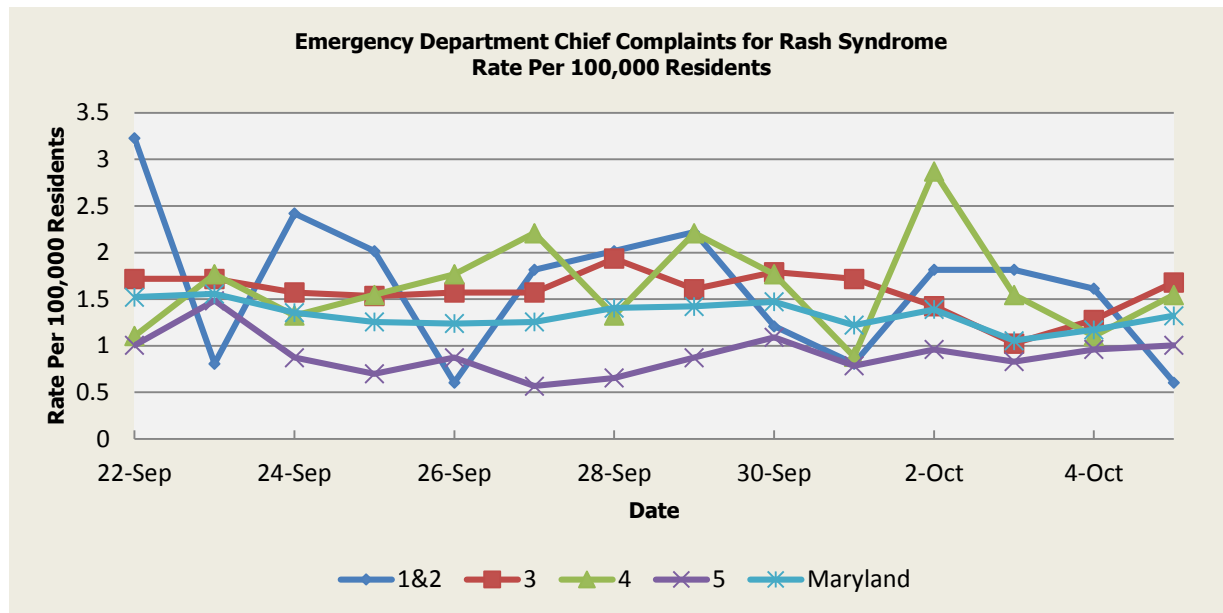
There were no Localized Lesion Syndrome outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.16	1.79	2.05	0.91	1.42
Median Rate*	1.01	1.72	1.99	0.87	1.37

* Per 100,000 Residents

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Rash Syndrome



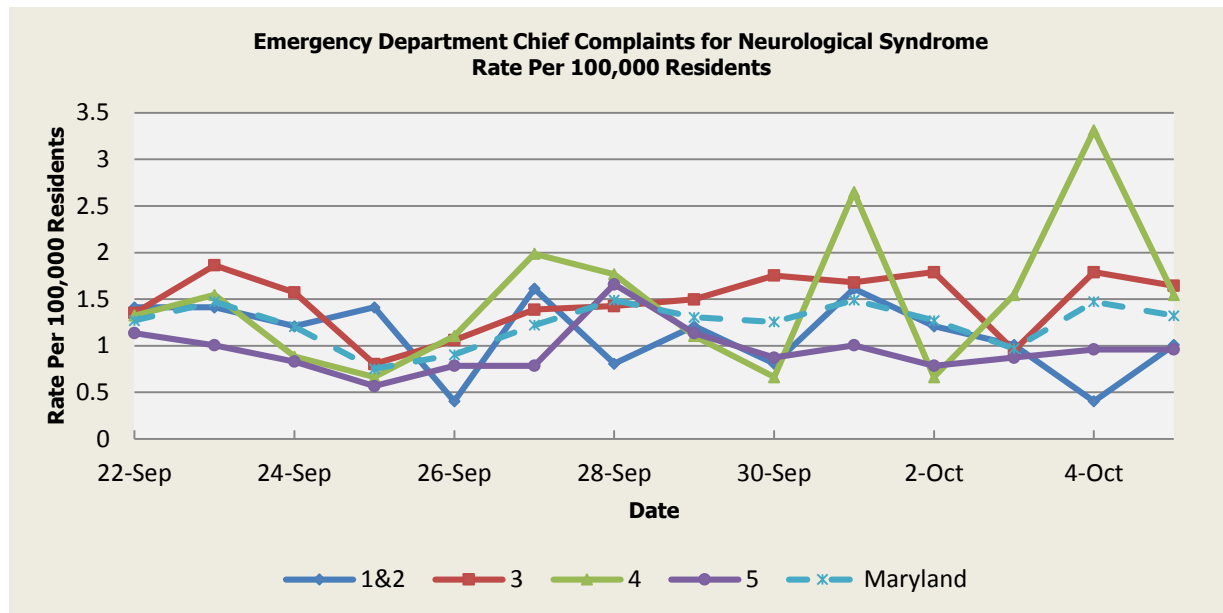
There was one Rash Syndrome outbreak reported this week, one (1) outbreak of Hand, Foot, and Mouth Disease associated with a Daycare Center (Region 5)

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.25	1.68	1.77	0.98	1.38
Median Rate*	1.21	1.61	1.77	0.92	1.32

* Per 100,000 Residents

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Neurological Syndrome



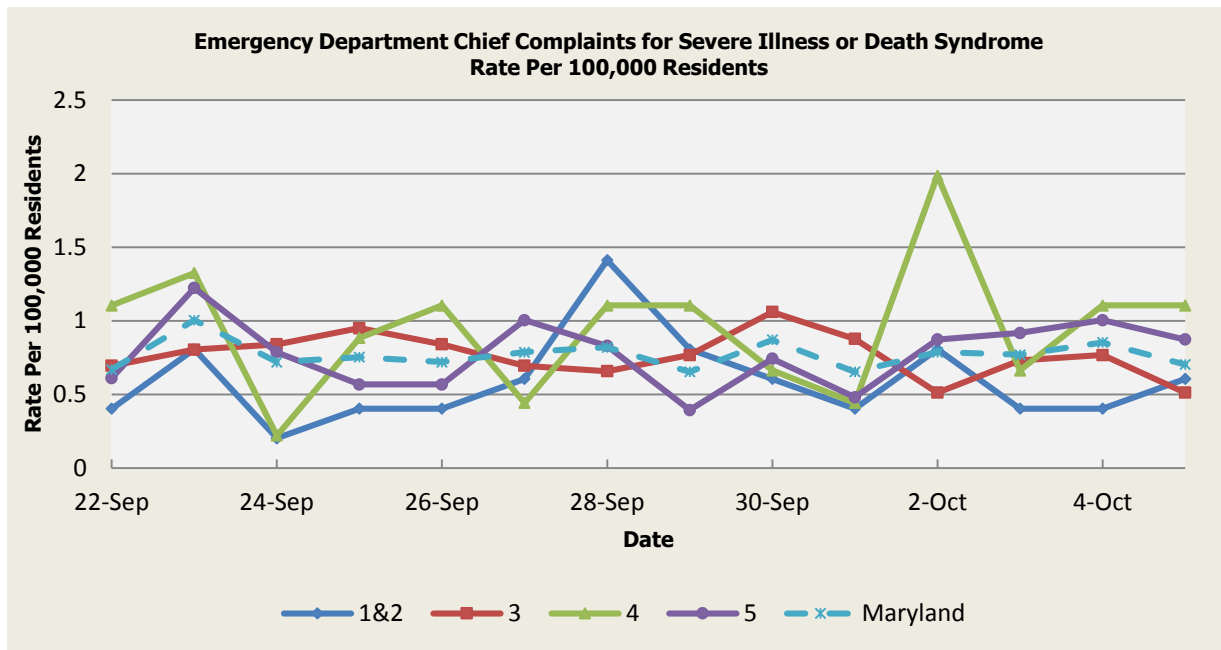
There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.78	0.96	0.87	0.61	0.80
Median Rate*	0.81	0.88	0.66	0.57	0.72

* Per 100,000 Residents

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Severe Illness or Death Syndrome



There were no Severe Illness or Death Syndrome outbreaks reported this week.

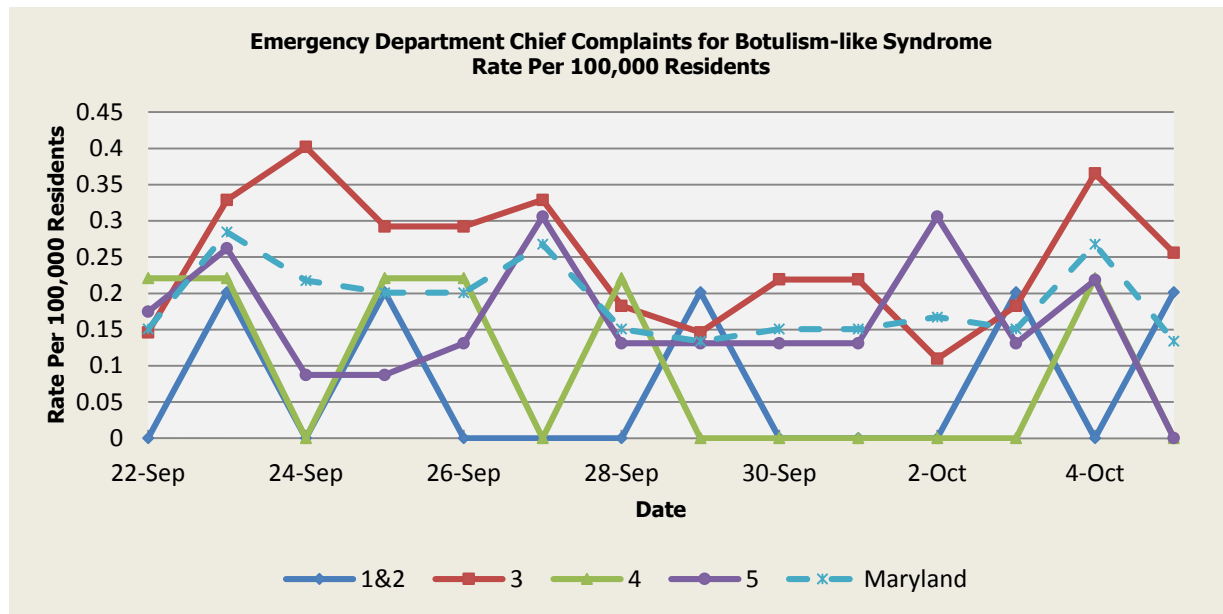
Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.66	0.90	0.84	0.52	0.73
Median Rate*	0.60	0.84	0.66	0.48	0.70

* Per 100,000 Residents

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SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome



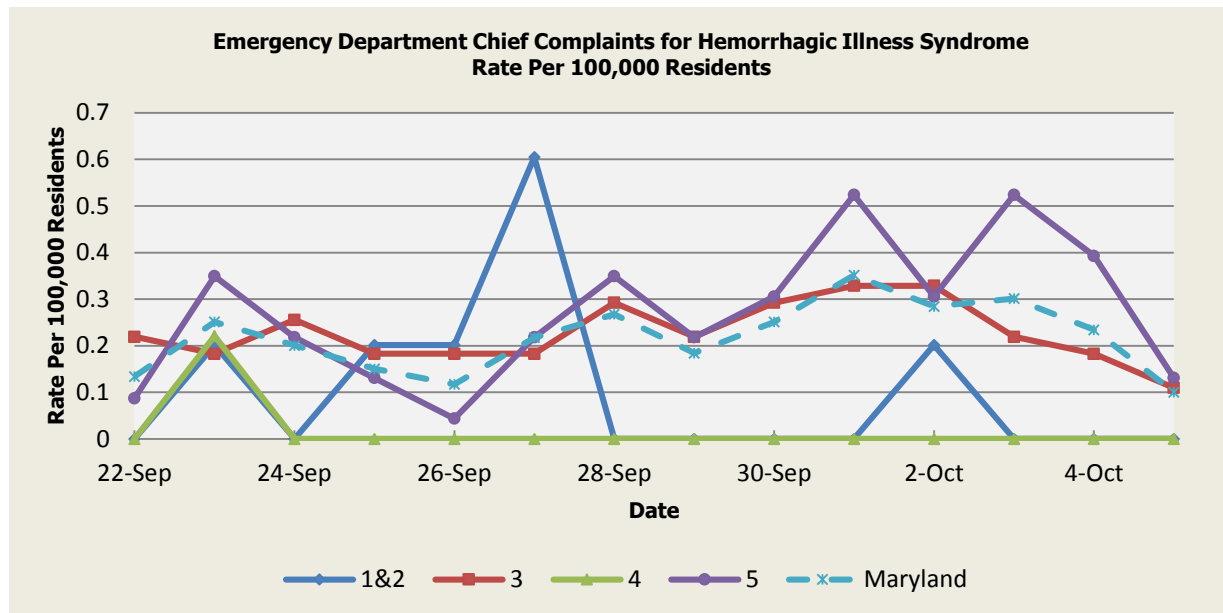
There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 9/22 (Regions 4,5), 9/23 (Regions 1&2,3,4,5), 9/24 (Region 3), 9/25 (Regions 1&2,3,4), 9/26 (Regions 3,4), 9/27 (Regions 3,5), 9/28 (Region 4), 9/29 (Region 1&3), 10/2 (Region 5), 10/3 (Region 1&2), 10/4 (Regions 3,4,5), 10/5 (Regions 1&2,3). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.07	0.12	0.06	0.08	0.10
Median Rate*	0.00	0.11	0.00	0.04	0.08

* Per 100,000 Residents

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Hemorrhagic Illness Syndrome



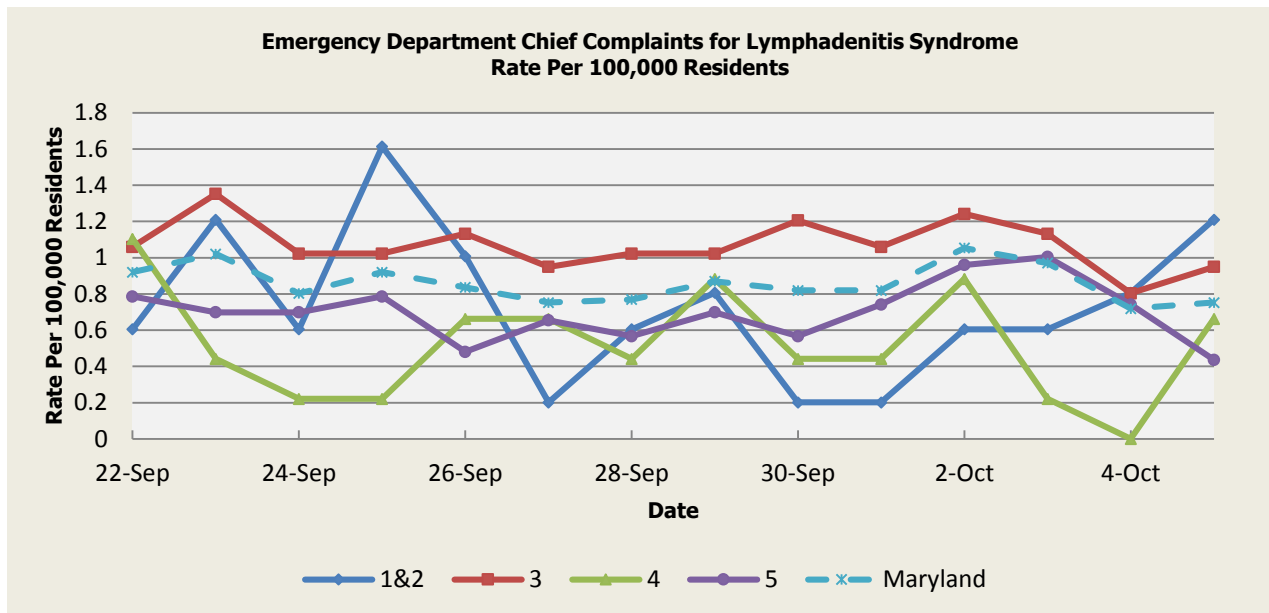
There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 9/23 (Regions 1&2,4,5), 9/25 (Region 1&2), 9/26 (Region 1&2), 9/27 (Region 1&2), 9/28 (Region 5), 9/30 (Region 5), 10/1 (Region 5), 10/2 (Regions 1&2,3,5), 10/3 (Region 5), 10/4 (Region 5). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.04	0.16	0.04	0.13	0.13
Median Rate*	0.00	0.11	0.00	0.09	0.08

* Per 100,000 Residents

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Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 9/22 (Regions 4,5), 9/23 (Regions 1&2,3), 9/25 (Regions 1&2,5), 9/26 (Region 1&2), 9/29 (Regions 1&2,4), 9/30 (Region 3), 10/2 (Regions 3,4), 10/3 (Region 5), 10/4 (Region 1&2), 10/5 (Region 1&2). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.38	0.59	0.40	0.39	0.48
Median Rate*	0.40	0.51	0.44	0.35	0.44

* Per 100,000 Residents

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MARYLAND REPORTABLE DISEASE SURVEILLANCE

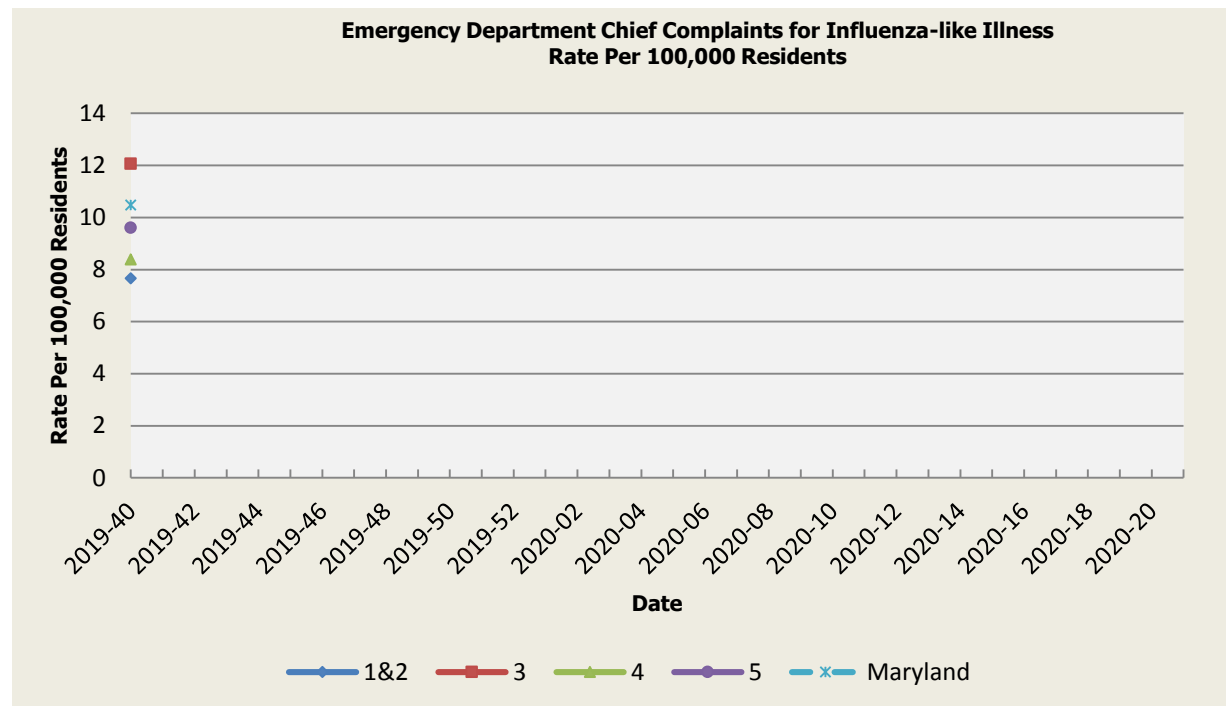
Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.

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SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2019 through May 2020). Seasonal Influenza activity for Week 40 was: Minimal Intensity and Sporadic geographic activity.

Influenza-like Illness

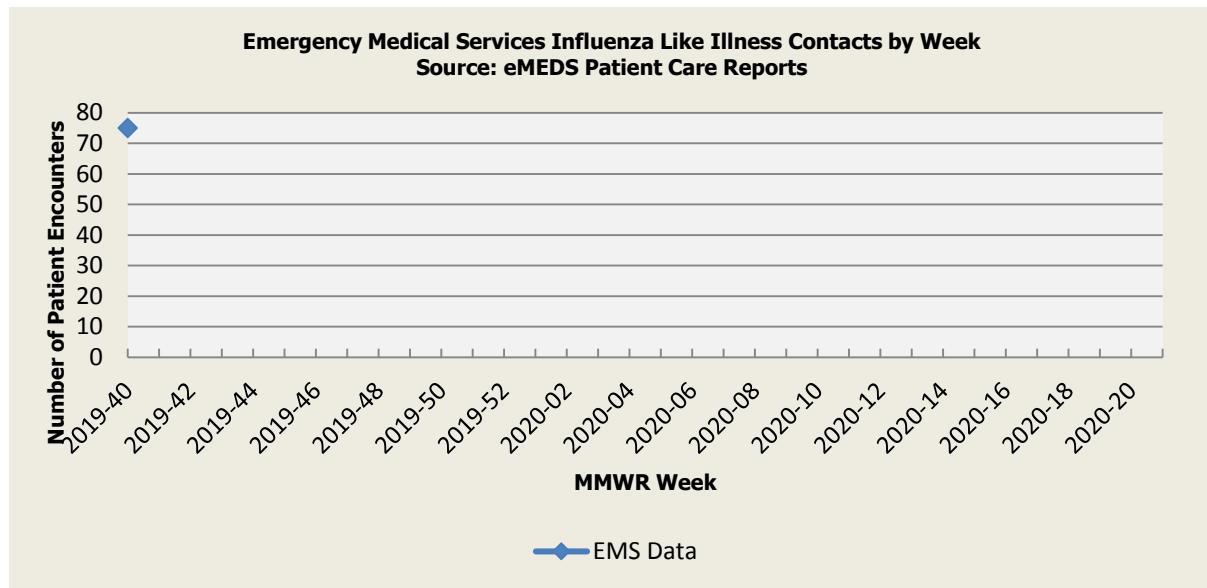


Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	10.13	13.22	12.73	11.20	12.15
Median Rate*	7.66	10.19	9.27	8.73	9.35

* Per 100,000 Residents

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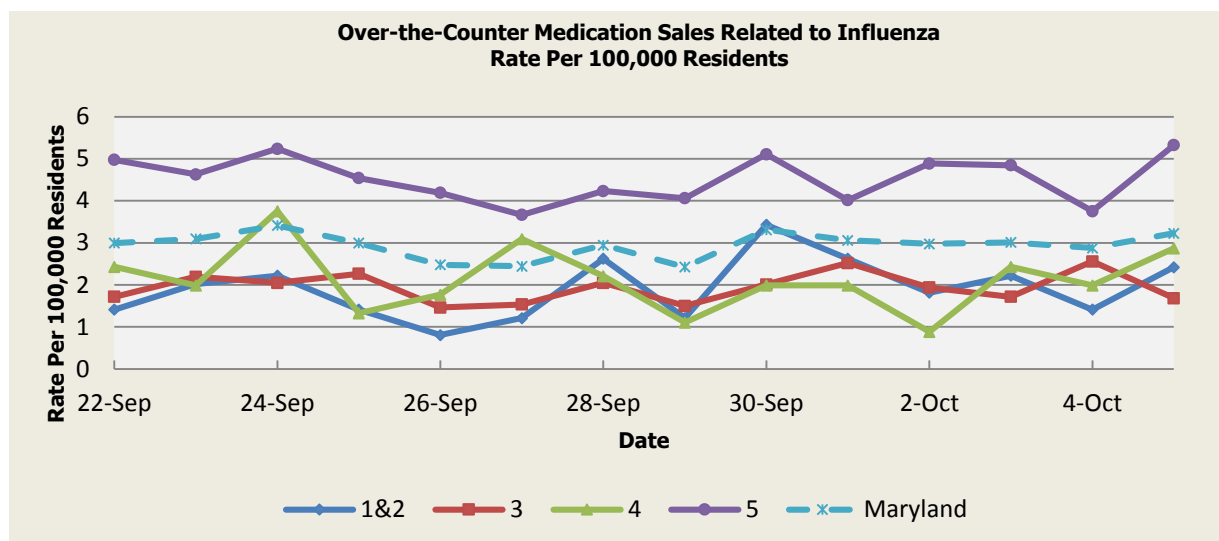
Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected “flu like illness” as a primary or secondary impression of a patient’s illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

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Over-the-Counter Influenza-Related Medication Sales



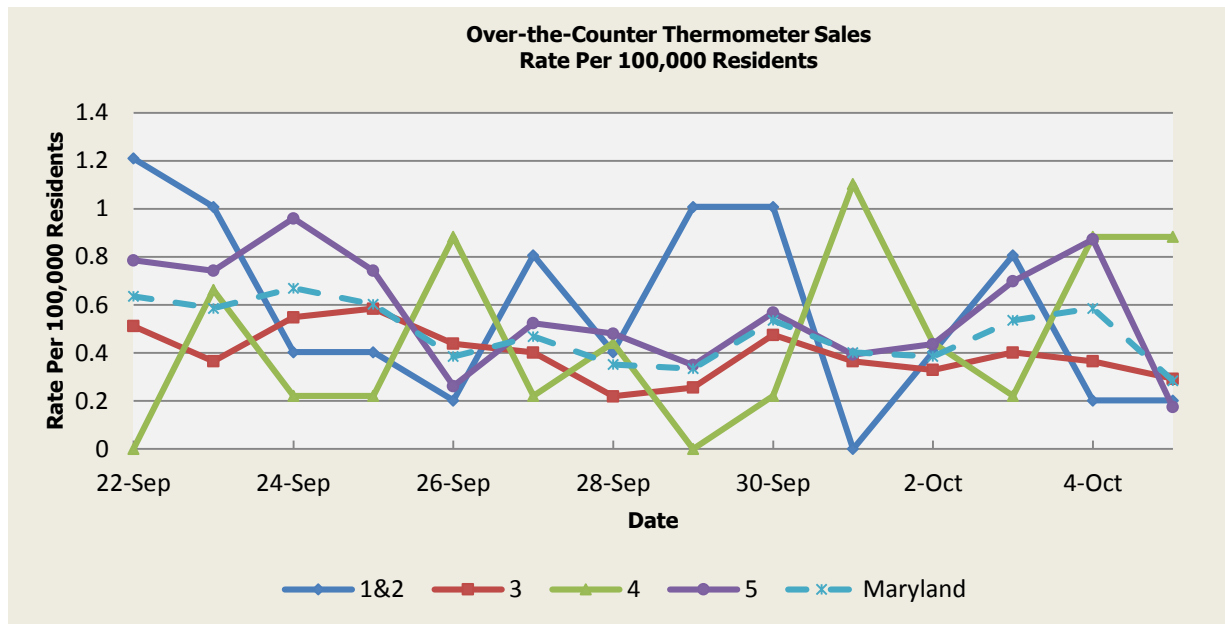
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

OTC Medication Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.46	4.45	2.67	7.80	5.52
Median Rate*	2.82	3.58	2.21	7.03	4.75

* Per 100,000 Residents

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Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.94	2.80	2.23	3.72	3.12
Median Rate*	2.62	2.70	2.21	3.62	3.06

* Per 100,000 Residents

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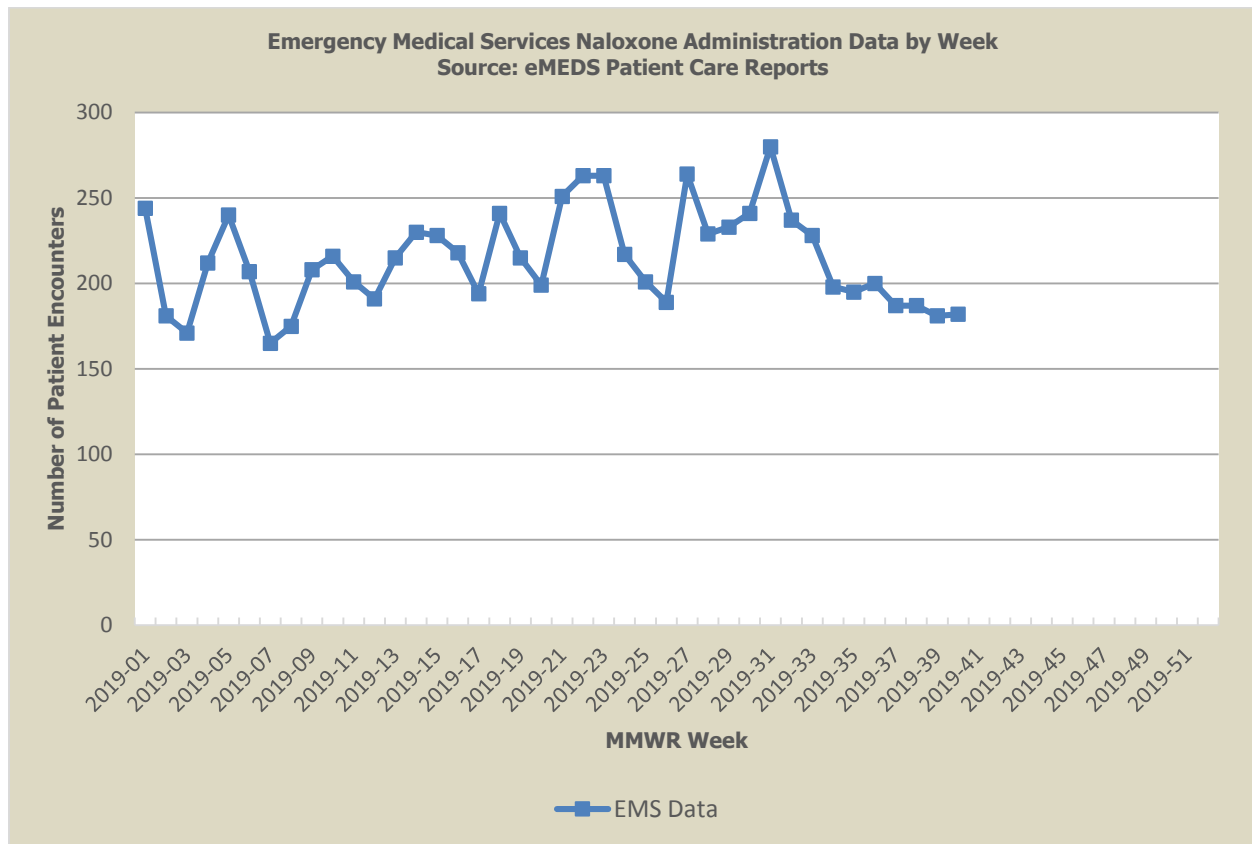
SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

In preparation for the release of new ESSENCE queries for identifying heroin, opioid and all drug overdoses, please note that we have removed the data chart showing unintentional overdose rates by heroin, opioid, or unspecified substances. These new data, when available, will be presented below.

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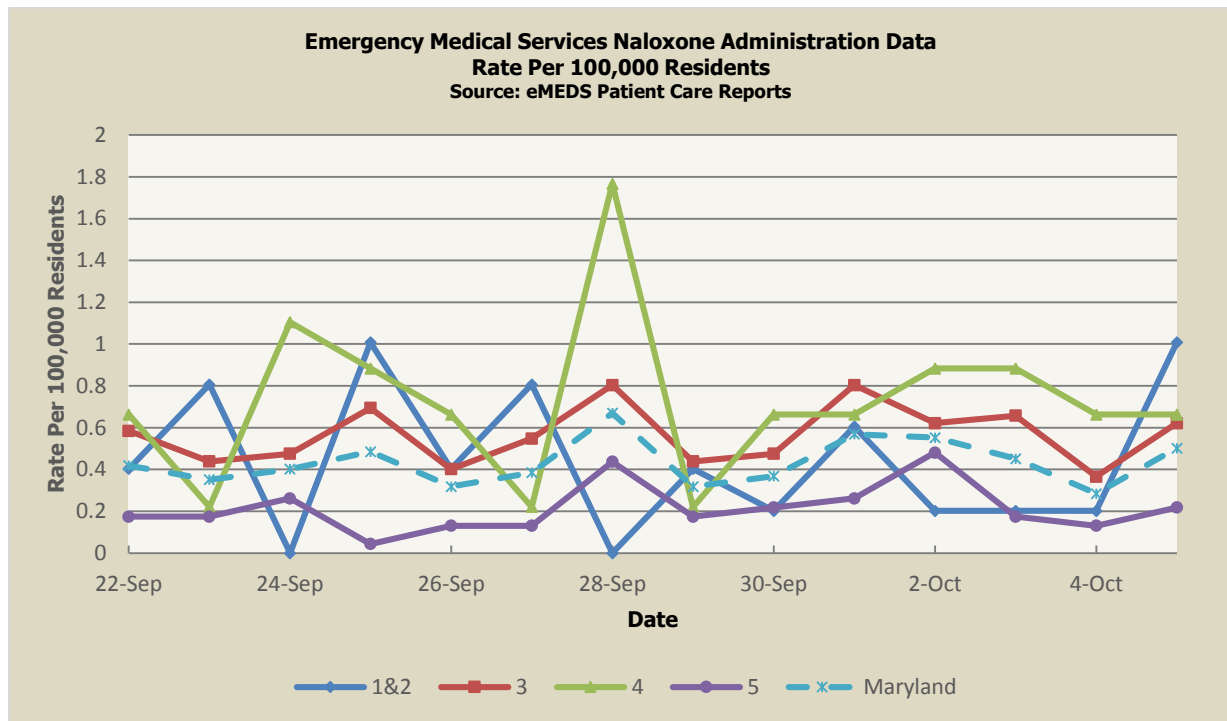
Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of October 10th, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 861, of which 455 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

There were no relevant human avian influenza reports this week

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week

NATIONAL DISEASE REPORTS

PLAGUE (NEW MEXICO), 7 Oct 2019, The New Mexico Department of Health's (NMDOH) Scientific Laboratory Division has confirmed a case of plague in a 72-year-old man from Torrance County, the 1st human case of plague in New Mexico this year [2019]. Read More: <https://www.promedmail.org/post/6714191>

EASTERN EQUINE ENCEPHALITIS (MULTISTATE), 6 Oct 2019, There have been 12 human cases of EEE this season in Massachusetts and 9 confirmed cases of EEE this year [2019] in animals -- 8 horses and a goat. State officials continue to remind residents throughout the commonwealth to take personal precautions to prevent mosquito bites. Read More: <https://www.promedmail.org/post/6712622>

HEPATITIS A (MULTISTATE), 6 Oct 2019, Health experts say there are more cases of hepatitis A in the state. The Louisiana Department of Health now has the count at 575. Livingston Parish has the most cases ranging from 121 to 240. One death has been reported so far in Louisiana. Read More: <https://www.promedmail.org/post/6712304>

INTERNATIONAL DISEASE REPORTS

MALARIA (DENMARK), 9 Oct 2019, Denmark has reported a travel-related case of malaria caused by *Plasmodium cynomolgi* in a Danish traveler returning from a visit to forested areas in peninsular Malaysia and Thailand during August-September 2018. Read More: <https://www.promedmail.org/post/6717110>

TYPHOID FEVER (PAKISTAN), 8 Oct 2019, The US Centers for Disease Control and Prevention (CDC) issued a level 1 travel alert regarding the ongoing outbreak in Pakistan of extensively drug-resistant (XDR) typhoid fever. Read More: <https://www.promedmail.org/post/6716070>

UNDIAGNOSED DISEASE (SUDAN), 6 Oct 2019, A man and more than 20 head of cattle died in Arbaat in Red Sea state on Thursday and Friday [3 & 4 Oct 2019] of an "unknown fever". Read More: <https://www.promedmail.org/post/6712623>

CRIMEAN-CONGO HEMORRHAGIC FEVER (PAKISTAN), 6 Oct 2019, A local factory worker [in Khyber-Pakhtunkhwa] died of high grade-fever with the family blaming death on Crimean-Congo hemorrhagic fever. Read More: <https://www.promedmail.org/post/6712338>

SCRUB TYPHUS (INDIA), 6 Oct 2019, Scrub typhus in Himachal Pradesh continues to be the disease that is claiming maximum lives in the state. According to the data available with the department of health and family welfare, this year till 5 Oct 2019, the death toll in the state has been 12, while 9477 were tested, of which 1148 tested positive. Read More: <https://www.promedmail.org/post/6712248>

PLAGUE (DEMOCRATIC REPUBLIC OF CONGO), 6 Oct 2019, On 25 Sep 2019, a rodent and guinea pig die-off was reported to the health authorities of the Aru Health Zone, Ituri Province, DRC, in the village of Omeyi in the Ongoyi health area. Subsequently a family cluster of 4 cases with the clinical symptoms consistent with the definition of bubonic plague was reported. Read More: <https://www.promedmail.org/post/6710185>

E. COLI EHEC (CANADA), 5 Oct 2019, Newfoundland and Labrador's provincial health department is advising residents of an outbreak of *E. coli* bacteria. There have been 22 cases of *E. coli* confirmed in the province this week, according to an advisory issued Friday afternoon. Read More: <https://www.promedmail.org/post/6711589>

LISTERIOSIS (EUROPE), 5 Oct 2019, A total of 3 people have died and one woman has had a miscarriage after eating cold meat contaminated with *Listeria*, the public health institute

RIVM [Netherlands National Institute for Public Health and the Environment] said on Friday.
Read More: <https://www.promedmail.org/post/6711608>

MYCOPLASMA PNEUMONIAE (TAIWAN), 3 Oct 2019, Taipei's Cathay General Hospital has reported that a case of _Mycoplasma_ infection in a 5-year-old girl led to high fever, a severe cough and pleural effusion. Even with hospital admission and antibiotic treatment, she did not fully recover until 3 weeks later, the hospital said. Read More: <https://www.promedmail.org/post/6707897>

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website:
<http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS):
<http://flusurvey.health.maryland.gov>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

